



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

indistinctly. The worm was approximately 35 mm. long. While the diagnosis of *Gongylonema* in this third case rests upon somewhat incomplete data, I believe it to be correct.

This third case is now recorded in order to emphasize the point that we have in the United States a parasitic infection of man which seemingly has a wide distribution (Florida, Georgia, and Arkansas) but which is rarely recognized.

The infection doubtless occurs through swallowing insects, perhaps croton bugs, *Aphodius*, *Blaps*, etc. Present evidence is to the effect that the presence of this worm produces an irritation with resulting nervousness, but evidence is lacking that it will cause any dangerous condition.

Similar (*Gongylonema*) infections are wide spread in cattle, sheep, mice, rats, etc.; and it is entirely possible, or probable, that the worm found in man is specifically identical with the form found in some other animal. This point remains *sub judice* until a sufficient amount of well-preserved material from man becomes available to establish the specific characters. In the meantime, in order not to confuse specific diagnoses and in order to avoid erroneous deductions as to life history, I suggest—on purely practical grounds—that the worm described and figured by Ward (1916) as "*Gongylonema* (?) *pulchrum*" be referred to as "*Gongylonema hominis* sp. dub." Although it is entirely possible that Ward is correct in his suspicion, rather than opinion, that the worm is identical with the species found in swine, there are good grounds for keeping the parasite nomenclatorially distinct until the point is definitely established.

---

## A NOTE ON THE COURSE OF PULMONARY TUBERCULOSIS MORTALITY SINCE 1914.<sup>1</sup>

The course of mortality from pulmonary tuberculosis during and since the World War exhibits variations that are of unusual interest. It is not yet possible to analyze the statistics in detail, for the reason that the data for 1919 and 1920 have not been completely tabulated, but such gross rates as we have are sufficiently suggestive to warrant preliminary presentation.

In the accompanying table are compiled the mortality rates per 100,000 living persons for the United States, England and Wales, the Dublin registration area, and Spain, by years, since 1914.

---

<sup>1</sup> From the Statistical Office, Field Investigations, United States Public Health Service.

*Mortality from pulmonary tuberculosis since 1914 in the United States, Great Britain, and Spain.*

Year.	United States.		Great Britain.		Spain. <sup>e</sup>
	24 registration States. <sup>a</sup>	Metropolitan Life Insurance Co. (industrial). <sup>b</sup>	England and Wales. <sup>c</sup>	Dublin registration area. <sup>d</sup>	
1914.....	123	185	105	259	123
1915.....	123	180	116	292	127
1916.....	121	173	118	268	129
1917.....	125	172	125	265	137
1918.....	130	171	134	283	168
1919.....	109	142	102	.....	140
1920.....	.....	122	.....	.....	.....

<sup>a</sup> Including District of Columbia. Data compiled from Mortality Statistics, Bureau of the Census, population estimates (intercensal) being furnished by the Census Bureau.

<sup>b</sup> From Statistical Bulletins, Metropolitan Life Insurance Co. The rates are exclusive of deaths among persons under 1 year of age.

<sup>c</sup> From Annual Reports of Registrar-General for England and Wales, except 1919, which was computed from data in Quarterly Reports Nos. 284, 285, 286. The rates are for the civilian population only for the years 1915-1919.

<sup>d</sup> From Weekly Returns of Births and Deaths (Yearly Summary) in the Dublin registration area, 1918.

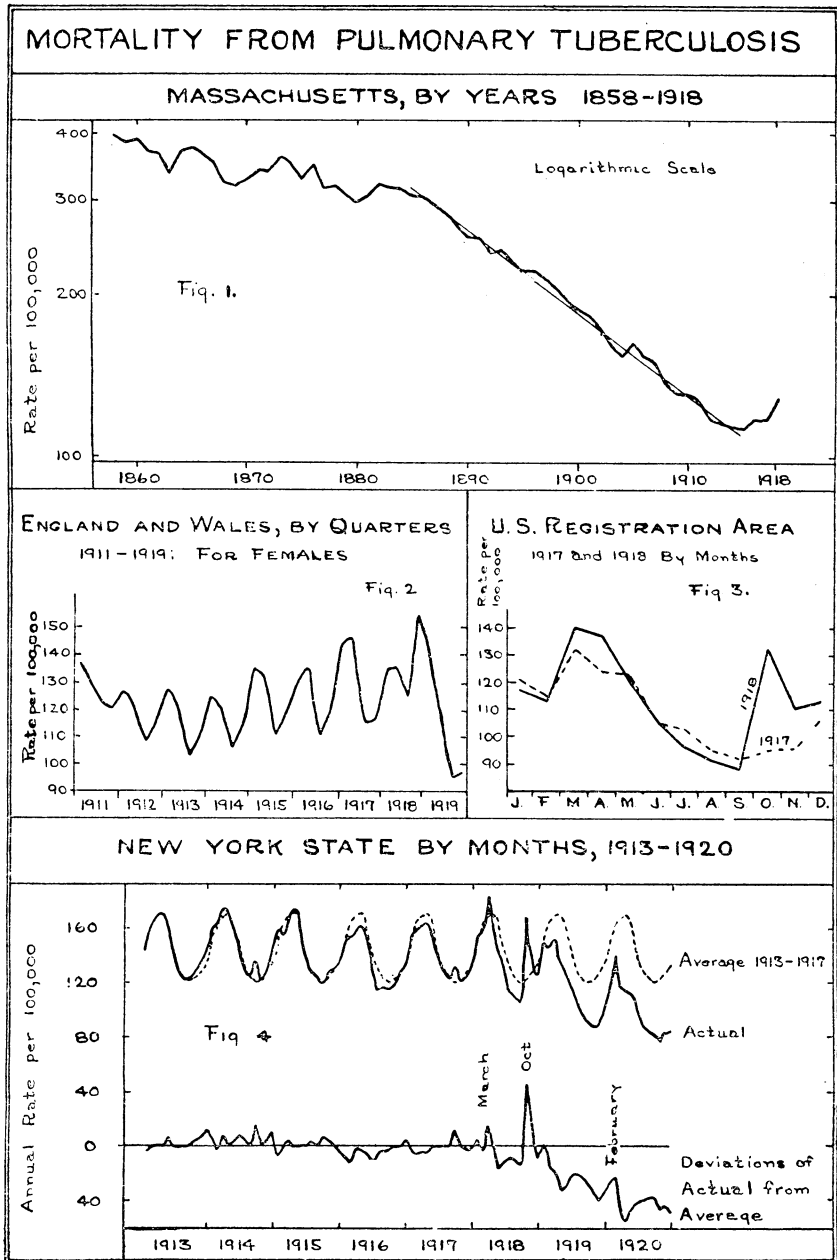
<sup>e</sup> From International Journal of Public Health, vol. 1, No. 1, July, 1920; reprinted from Anuario Estadístico de España, Año V, 1918. No data given for all forms of tuberculosis. The rate for 1919 is from data given in Anuario Estadístico de España, Año VI, 1919.

While dependable statistics for the countries of Central Europe are lacking, a considerable increase in pulmonary tuberculosis mortality has been commented upon frequently in the reports. Whether or not a decline in the rate in those countries has set in since the war ended is not yet known; but considering the three countries included in the table above, the general picture afforded is that of a more or less marked rise in mortality during the period of the war, followed by a definite drop during 1919 and 1920 in the countries for which we have data.

This variation in the course of pulmonary tuberculosis mortality at once appeals to the vital statistician as a phenomenon of probably unusual significance. We know that conditions under which people lived were radically changed during this momentous period. In what specific ways did these changes affect the tuberculosis rate?

The facts are not available in sufficient detail to afford us an answer to the question. A further consideration of the gross facts, however, as shown in the accompanying graphs, may be pertinent.

In Figure 1 the course of pulmonary tuberculosis mortality in Massachusetts during the 60-year period from 1858 to 1918 is presented as a background. The annual rates are plotted on a logarithmic scale, in order to show the relative variations from year to year. From about 1885 to 1915 the *rate* of decline was fairly constant (as the light, straight line in the chart indicates). In 1916 and 1917 a rise occurred. This was followed by a further quite marked increase in 1918. The upturn of the curve during 1916, 1917, and 1918 is clearly a departure from the course of pulmonary tuberculosis mor-



The data upon which the above graphs are based are as follows:

Fig. 1. Registration reports, Massachusetts, for various years.

Fig. 2. Reproduced from the British Medical Journal, Feb. 5, 1921, page 202, based on the 1919 report of the Registrar-General.

Fig. 3. Rates computed from the United States Bureau of the Census mortality reports for 1917 and 1918, after allowing for the withdrawal of males for military service.

Fig. 4. Monthly Vital Statistics Reviews, New York State Department of Health.

tality during the preceding 30 years. The Massachusetts figures are typical of the great majority of registration States during the last 20 years.

The Massachusetts data are not available for 1919 and 1920, and we must turn to records of another State, New York, for more detailed data for these years. In Figure 4 the monthly rates (for New York, on an annual basis) are plotted for the period 1913-1920. It was found that the seasonal curve for each year was quite uniform during the period 1913-1917, but that in 1918, 1919, and 1920 it presented irregularities. Accordingly, in order to obtain a more clearly defined picture of these irregularities, as well as of the trend, an average seasonal curve was found for 1913-1917, using the median year for each month. This is plotted as a dotted line in Figure 4 and extended through 1920. It is clearly shown that in the months in which influenza was epidemic the tuberculosis death rate rose to abnormal proportions.

The same phenomenon appeared in England and Wales, as indicated in Figure 2, in which the mortality rate from pulmonary tuberculosis among females is plotted by quarters for the period 1911-1919.

A further scrutiny of the data for New York as plotted in Figure 4 shows that with the exception of the periods of influenza epidemic, the rate for every month was lower in 1918 than in 1917 or previous years. In order to bring this out even more distinctly, the deviation of the rate for each month from the average for the corresponding months was plotted in the same figure. The same result is found when we compare the rates for each month in 1918 with those for corresponding months in 1917, in the entire death registration area of the United States (see Fig. 3).

The course of mortality from pulmonary tuberculosis during the period 1914-1920 may be described, therefore, briefly as follows:

- (1) The more or less steady decline prior to the war was interrupted by a definite rise, which was widespread and lasted through 1918, followed by a marked decline in 1919 and 1920.

- (2) The high rate for 1918 apparently was due entirely to the two waves of epidemic influenza, and the rate for 1920 was probably somewhat increased by the 1920 epidemic influenza wave. Presumably many tuberculous persons were carried off by the influenza epidemic, and a part of the low tuberculosis rate in 1919 and 1920 reasonably may be ascribed to the earlier removal of persons who would have died in these two years.

- (3) Roughly discounting, however, the effect of the influenza epidemic, the existence of an unusual wave of mortality from pulmonary tuberculosis is still clearly shown, beginning in 1916, reaching its crest in 1917, and declining in 1918, 1919, and 1920.

The cause of the rise in the mortality rate from pulmonary tuberculosis in 1916 and 1917 is, of course, at present obscure. If there be an association between economic conditions and the tuberculosis death rate, a possible explanation is suggested in the fact that immediately preceding the rise in mortality during 1914 and 1915 in the United States there was a period of serious unemployment and that in 1917-1920, wages kept pace with living costs and the demand for labor was extraordinarily great.

NOTE.—A summary of Dr. Stevenson's comment upon the course of tuberculosis mortality in England and Wales, as given in the 1919 Report of the Registrar-General, is made in the *British Medical Journal* (Feb. 5, 1921, p. 202) in part as follows:

"It is remarkable that a fall in the mortality from tuberculosis occurred in 1919, notwithstanding the effects of the influenza epidemic which continued into the early part of the year. Dr. Stevenson gives reason for concluding that the recent trend of tuberculosis mortality can only be profitably studied by disentangling it from the mortality caused among the tuberculous population by influenza. When this is done, he considers that the figures show that the tuberculosis mortality reached a maximum in 1917, and that a decline set in during the last year of the war and developed to a remarkable extent during the first year of peace. He considers it necessary to lay stress on these points, as in the absence of their consideration the recently experienced tuberculosis mortality has been regarded as disappointing. In seeking to arrive at a conception of the course of tuberculosis mortality during 1918-19, an attempt has to be made to estimate what this would probably have been in the absence of the violent disturbance caused by influenza. Accordingly, the mortality of each quarter of the year is considered separately; only the second quarter was unaffected by influenza, and the other three quarters were affected in varying degrees. A diagram illustrating the mortality of females from tuberculosis in each quarter from 1911 to 1919, inclusive, is here reproduced.<sup>2</sup> It will be seen that after remaining at a minimum in the years 1912-1914, the quarterly rates gradually increased during the three following years, but began to fall again during the first two quarters of 1918, after which the great epidemic of influenza temporarily arrested the fall, raising the rates for the next three quarters to a high level. The normal seasonal rise and fall of tuberculosis mortality shows a minimum in the third quarter and a maximum in the first or second. The second quarter was unaffected by the great epidemic, and is taken as most nearly representing the probable behavior of the yearly mortality if the epidemic had not occurred. The curve of the mortality of the second quarter, after maintaining a minimum for the three years 1912-1914, gradually rose during the next three to a maximum in 1917, and then fell uninterruptedly to 1919, when the lowest point was reached. There was a reduction below the nine years' average from 10 to 20 per cent in the last three quarters' mortality, but Dr. Stevenson points out that caution must be exercised in interpreting this.

---

<sup>2</sup> See Fig. 2 in accompanying chart—Ed.

" 'If,' he says, 'influenza increased the death rate of the preceding three quarters by killing off tuberculous patients who would otherwise have died a little later, the great fall which has occurred since the epidemic came to an end may be in part attributable to this earlier removal of persons who would otherwise have died in the quarters of low mortality.' "

"He does not, however, consider that this is a serious source of error. There is no evidence that mortality from the nonpulmonary forms of the disease was increased by the epidemic; these nonpulmonary rates were very low in 1919, and this is thought to point to a real decline in the destructiveness of tuberculosis."

### DEATHS DURING WEEK ENDED MAY 14, 1921.

*Summary of information received by telegraph from industrial insurance companies for week ended May 14, 1921, and corresponding week, 1920. (From the "Weekly Health Index," May 17, 1921, issued by the Bureau of the Census, Department of Commerce.)*

	Week ended May 14, 1921.	Corresponding week, 1920.
Policies in force.....	46, 840, 169	43, 723, 332
Number of death claims.....	8, 329	8, 440
Death claims per 1,000 policies in force.....	9. 3	10. 1

*Deaths from all causes in certain large cities of the United States during the week ended May 14, 1921, infant mortality, annual death rate, and comparison with corresponding week of preceding years. (From the "Weekly Health Index," May 17, 1921, issued by the Bureau of the Census, Department of Commerce.)*

City.	Estimated population, July 1, 1921.	Week ended May 14, 1921.		Average annual death rate per 1,000. <sup>1</sup>	Deaths under 1 year.		Infant mortality rate week ended May 14, 1921. <sup>3</sup>
		Total deaths.	Death rate. <sup>1</sup>		Week ended May 14, 1921.	Previous year or years. <sup>2</sup>	
Akron, Ohio.....	229, 195	30	6. 8	A 12. 4	3	A 5	29
Albany, N. Y.....	115, 071	38	17. 2	C 17. 4	3	C 7	67
Atlanta, Ga.....	207, 473	57	14. 3	C 11. 1	5	C 4	.....
Baltimore, Md.....	751, 537	198	13. 7	A 18. 2	29	A 31	81
Birmingham, Ala.....	186, 133	59	16. 5	A 16. 2	11	A 9	.....
Boston, Mass.....	757, 634	185	12. 7	A 18. 8	39	A 40	105
Bridgeport, Conn.....	149, 967	27	9. 4	A 14. 3	5	A 7	63
Buffalo, N. Y.....	519, 608	117	11. 7	C 15. 3	17	C 28	66
Cambridge, Mass.....	110, 444	30	14. 2	A 13. 6	5	A 5	89
Camden, N. J.....	119, 672	26	11. 3	.....	5	.....	.....
Chicago, Ill.....	2, 780, 655	580	10. 9	A 15. 1	81	A 126	.....
Cincinnati, Ohio.....	403, 418	102	13. 2	C 14. 7	12	C 13	79
Cleveland, Ohio.....	831, 138	187	11. 7	C 12. 8	27	C 34	72
Columbus, Ohio.....	245, 358	59	12. 5	C 13. 7	2	C 1	23
Dallas, Tex.....	165, 282	29	9. 1	A 13. 0	4	A 5	.....
Dayton, Ohio.....	158, 119	26	8. 6	C 7. 1	3	C 4	49
Denver, Colo.....	263, 152	64	12. 7	A 13. 9	8	.....	.....
Detroit, Mich.....	1, 070, 450	210	10. 2	C 10. 4	51	C 51	96
Fall River, Mass.....	120, 668	45	19. 4	C 13. 4	10	C 8	150
Grand Rapids, Mich.....	141, 197	24	8. 9	C 20. 7	4	C 13	68
Houston, Tex.....	144, 340	30	10. 8	.....	6	.....	.....
Indianapolis, Ind.....	325, 215	79	12. 7	C 18. 2	4	C 19	31
Jersey City, N. J.....	302, 788	71	12. 2	C 15. 5	10	C 15	.....
Kansas City, Kans.....	103, 908	13	6. 5	.....	1	.....	24
Kansas City, Mo.....	336, 157	81	12. 6	C 14. 3	8	C 10	.....

<sup>1</sup> Annual rate per 1,000 population.

<sup>2</sup> "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1920.

<sup>3</sup> Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1920. Cities left blank are not in the registration area for births.

<sup>4</sup> Data based on statistics of 1915, 1916, and 1917.